



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

XVI. *An Account of a Child with a double Head. In a Letter from Everard Home, Esq. F. R. S. to John Hunter, Esq. F. R. S.*

Read March 25, 1790.

DEAR SIR,

I FEEL a particular satisfaction in having been enabled, through the kind attention of my Friend Captain BUCHANAN, to add to your invaluable collection the very uncommon double skull of a monstrous child, born in the East Indies, which attracted the attention of all the curious in Calcutta, where it was shewn alive; and, should the following account of it appear to you of sufficient importance, I shall request that you will do me the honour of laying it before the Royal Society.

It is much to be regretted, that the histories of monstrous appearances in the structure of the human body which are to be found in the works of the older writers, and even of many of the moderns, are so little to be depended upon. Few authors have contented themselves with giving a simple detail of facts that were extraordinary; but, from an over anxiety to make them still more wonderful, or from having given an implicit belief to the accounts received from the credulous and ignorant, they have commonly added circumstances too extravagant to deserve the attention of a reasonable mind, which
prevent

prevent the reader from giving credit to any part of the narration. This has been so general, that whenever the history of any thing uncommon appears, the mind is impressed with a doubt of its authenticity, and requires some stronger evidence of the facts than the single testimony of an individual in other respects unimpeached in his veracity.

As the histories of remarkable deviations from the common course of nature in the formation of the human body already registered in the Philosophical Transactions are very numerous, I am desirous of adding to them an account of one so truly uncommon, that, I believe, no similar instance is to be found upon record. It is a species of *lusus naturæ* so unaccountable, that, although the facts are sufficiently established by the testimonies of the most respectable witnesses, I should still be diffident in bringing them before the Royal Society, were I not enabled at the same time to produce the double skull itself, in which the appearances illustrate so clearly the different parts of the history that it must be rendered perfectly satisfactory to the minds of the most incredulous.

The following account of the child, when six months old, I was favoured with from Sir JOSEPH BANKS; who, from the hand-writing, and other circumstances, believes that it was written by the late Colonel PIERCE. I have, however, been less solicitous to ascertain the author, as the observations contained in this account agree so intirely with the remarks that were afterwards made, and with the appearances of the skull, that they require no name being annexed to them, in confirmation of their having been made with accuracy and fidelity.

The child was born in May, 1783, of poor parents; the mother was thirty years old, and named NOOKI; the father

was called HANNAI, a farmer at Mandalgent near Bardawan, in Bengal, and aged thirty-five.

At the time of the child's birth, the woman who acted as midwife, terrified at the strange appearance of the double head, endeavoured to destroy the infant by throwing it upon the fire, where it lay a sufficient time before it was removed to have one of the eyes and ears considerably burnt.

The body of the child was naturally formed, but the head appeared double, there being, besides the proper head of the child, another of the same size, and to appearance almost equally perfect, attached to its upper part. This upper head was inverted, so that they seemed to be two separate heads united together by a firm adhesion between their crowns, but without any indentation at their union, there being a smooth continued surface from the one to the other. The face of the upper head was not over that of the lower, but had an oblique position, the center of it being immediately above the right eye.

When the child was six months old, both of the heads were covered with black hair, in nearly the same quantity. At this period the skulls seemed to have been completely ossified, except a small space between the ossa frontis of the upper one, like a fontinelle.

Observations on the superior or inverted head.

No pulsation could be felt in the situation of the temporal arteries; but the superficial veins were very evident.

The neck was about two inches long, and the upper part of it terminated in a rounded soft tumor, like a small peach.

One of the eyes had been considerably hurt by the fire, but the other appeared perfect, having its full quantity of motion; but the eyelids were not thrown into action by any thing suddenly approaching the eye; nor was the iris at those times in

the least affected; but, when suddenly exposed to a strong light, it contracted, although not so much as it usually does. The eyes did not correspond in their motions with those of the lower head; but appeared often to be open when the child was asleep, and shut when it was awake.

The external ears were very imperfect, being only loose folds of skin; and one of them mutilated by having been burnt. There did not appear to be any passage leading into the bone which contains the organ of hearing.

The lower jaw was rather smaller than it naturally should be, but was capable of motion. The tongue was small, flat, and adhered firmly to the lower jaw, except for about half an inch at the tip, which was loose. The gums in both jaws had the natural appearance; but no teeth were to be seen either in this head or the other.

The internal surfaces of the nose and mouth were lubricated by the natural secretions, a considerable quantity of mucus and saliva being occasionally discharged from them.

The muscles of the face were evidently possessed of powers of action, and the whole head had a good deal of sensibility, since violence to the skin produced the distortion expressive of crying, and thrusting the finger into the mouth made it shew strong marks of pain. When the mother's nipple was applied to the mouth, the lips attempted to suck.

The natural head had nothing uncommon in its appearance; the eyes were attentive to objects, and its mouth sucked the breast vigorously. Its body was emaciated.

The parents of the child were poor, and carried it about the streets of Calcutta as a curiosity to be seen for money; and to prevent its being exposed to the populace, they kept it constantly covered up, which was considered as the cause of its being emaciated and unhealthy.

The attention of the curious was naturally attracted by so uncommon a species of deformity ; and Mr. STARK, who resided in Bengal during this period, paid particular attention to the appearances of the different parts of the double head, and endeavoured to ascertain the mode in which the two skulls were united, as well as to discover the sympathies which existed between the two brains. Upon his return to England, finding that I was in possession of the skull, and proposed drawing up an account of the child, he very obligingly favoured me with the following particulars, and has likewise allowed me to have a sketch taken from a very exact painting, made under his own inspection from the child while alive, by Mr. SMITH, a portrait painter then in India. From this drawing, which is annexed, and two others, representing the heads in the natural state ; and the skulls, when all the other parts were removed, a much more accurate idea will be given of the child's appearance than can be conveyed by any description.

At the time Mr. STARK saw the child, it must have been nearly two years old *, as it was some months before its death, which I have every reason to believe happened in the year 1785. At this period the appearances differed in many respects from those taken notice of when only six months old.

The burnt ear had so much recovered itself as only to have lost about one fourth part of the loose pendulous flap. The openings leading from the external ear appeared as distinct as in those of the other head. The skin surrounding the injured eye, which was on the same side with the mutilated ear, was in a

* The dentes molares, or double teeth, which usually appear at twenty months or two years of age, were through the gum ; and there was no reason to expect them very early in this child.

slight degree affected, and the external canthus much contracted, but the eye itself was perfect.

The eyelids of the superior head were never completely shut, remaining a little open, even when the child was asleep, and the eyeballs moved at random. When the child was roused, the eyes of both heads moved at the same time; but those of the superior head did not appear to be directed to the same object, but wandered in different directions. The tears flowed from the eyes of the superior head almost constantly, but never from the eyes of the other, except when crying.

The termination of the upper neck was very irregular, a good deal resembling the cicatrix of an old fore.

The superior head seemed to sympathise with the child in most of its natural actions. When the child cried, the features of this head were affected in a similar manner, and the tears flowed plentifully. When it sucked the mother, satisfaction was expressed by the mouth of the superior head, and the saliva flowed more copiously than at any other time; for it always flowed a little from it. When the child smiled, the features of the superior head sympathised in that action. When the skin of the superior head was pinched, the child seemed to feel little or no pain, at least not in the same proportion as was felt from a similar violence being committed on its own head or body.

When the child was about two years old, and in perfect health, the mother went out to fetch some water; and, upon her return, found it dead, from the bite of a *Cobra de capelo*. The parents at this time lived upon the grounds of Mr. DENT, the honourable East India Company's Agent for Salt at Tumloch, and the body was buried near the banks of the Boopnorain river. It was afterwards dug up by Mr. DENT

and his European servant, the religious prejudices of the parents not allowing them to dispense with its being interred.

My friend, Captain BUCHANAN, late Commander of the Ranger Packet, in the service of the honourable the East India Company, when at Bengal resided a few days in Mr. DENT's house. He was much struck with the uncommon appearance of the double skull, and expressed a wish that he might be allowed to bring it to Europe, and present it to me; knowing, from the interest I have always taken in those pursuits which have so long and so deeply engaged your attention, it would be a most acceptable present. His request was no sooner communicated to Mr. DENT, than it was complied with; that gentleman having too much liberality to hesitate a moment in sending so rare a curiosity to Europe. I should do both these gentlemen injustice, were I not to attribute their readiness upon the present occasion to oblige me, in a great measure to their knowing that the double skull would be deposited in your collection, which must now be considered more as a national and public repository than a private cabinet.

The two skulls which compose this monstrous head appear to be nearly of the same size, and equally complete in their ossification, except a small space at the upper edge of the offa frontis of the superior skull, similar to a fontinelle. The mode in which the two are united is curious, as no portion of bone is either added or diminished for that purpose; but the frontal and parietal bones of each skull, instead of being bent inwards, so as to form the top of the head, are continued on; and, from the oblique position of the two heads, the bones of the one pass a little way into the natural futures of the other, forming a zig-zag line, or circular suture uniting them together.

The

The two skulls appear to be almost equally perfect at their union; but the superior skull, as it recedes from the other, is becoming more imperfect and deficient in many of its parts.

The meatus auditorius in the temporal bone is altogether wanting.

The basis of the skull is imperfect in several respects, particularly in such parts as are to connect the skull with a body. The foramen magnum occipitale is a small irregular hole, very insufficient to give passage to a medulla spinalis; round its margin are no condyles with articulating surfaces, as there were no vertebræ of the neck to be attached to it. The foramen lacerum in basi cranii is only to be seen on one side, and even there too small for the jugular vein to have passed through.

The ossa palati are deficient at their posterior part; the lower jaw is too small for the upper, and the condyle and coronoid process of one side are wholly wanting.

In most of the other respects, the two skulls are alike; the number of teeth in both is the same, and is sixteen.

From an examination of the internal structure of the double skull, the two brains have certainly been inclosed in one bony case, there being no septum of bone between them. How far they were intirely distinct, and surrounded by their proper membranes, cannot now be ascertained; but from the sympathies which were taken notice of by Mr. STARK between the two heads, more particularly those of the superior with the lower, or more perfect, I should be inclined to believe, that there was a more intimate connection between them than simply by means of nerves, and therefore that the substance of the brains was continued into one another.

Had the child lived to a more advanced age, and given men of observation opportunities of attending to the effects of this
double

double brain, its influence upon the intellectual principle must have afforded a curious and useful source of inquiry; but unfortunately the child only lived long enough to complete the ossification of the skull so as to retain its shape, by which means we have been enabled to ascertain and register the fact, without having enjoyed the satisfaction that would have resulted from an examination of the brain itself, and a more mature investigation of the effects it would have produced.

Yours, &c.

E. H O M E.

Leicester-square,

May 22, 1790.

EXPLANATION OF THE PLATES.

Tab. XVII. The child is represented in this plate as it appeared at the age of twenty months, and is copied from a picture in the possession of Mr. STARK.

The painting was taken from the child six months before its death by Mr. SMITH, an ingenious artist, at that time residing in Bengal.

It conveys a general idea of the appearance of this extraordinary child, and the relative proportions between the double head and the body.

Tab. XVIII. fig. 1. In this figure the double head is represented exactly half the natural size. One of the eyes of the upper face appears smaller or more contracted than the other; this is in consequence of the injury it received when the child was thrown upon the fire.

The





Fig. I.

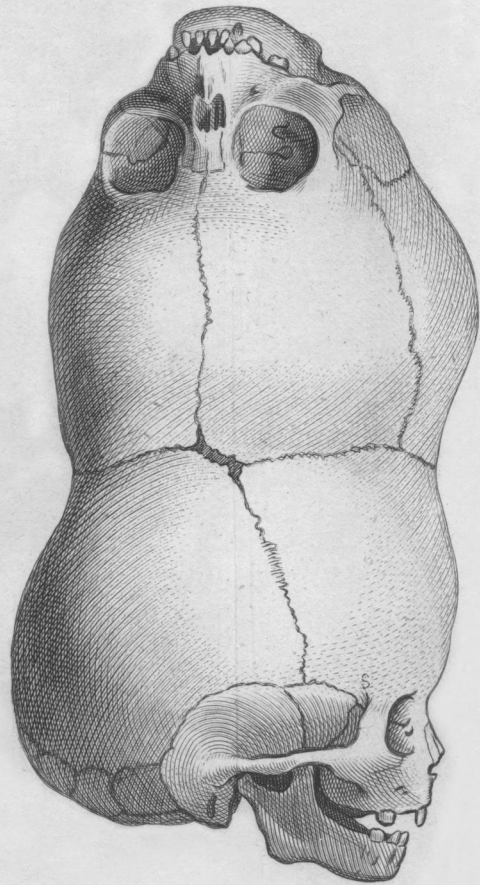


Fig. II.

The superficial veins upon the forehead of the upper head are very distinctly seen.

Fig. 2. An exact representation of the double skull, which is now in Mr. HUNTER's collection, upon the same scale as fig. 1.

It shews the curious manner in which the two skulls are united together, and the number of teeth formed before the child's death; which circumstance ascertains, with tolerable accuracy, its age.

